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# Harvesting and Marketing Edible Wild Plants



*S. Clements*

Many people are familiar with picking and eating huckleberries and blackberries. If you know what to look for, however, you'll find forests and fields are veritable grocery stores. Across the Pacific Northwest, wild edible plants are available during most of the year. Leaves, seeds, fruits, roots, and tubers of many plants are edible.

Wildcrafting (gathering plants from the wild) or forest farming (managing woodlots to promote or encourage desired plants) can be interesting and tasty pastimes or supplemental income sources. If you're a small landowner looking for a source of supplemental income, then wildcrafting, forest farming, or herb farming are some ways to use your property for this purpose.

This publication will introduce you to wild edible plants. It includes:

- An overview of historical and present uses
- Identification of market opportunities
- Processing and marketing hints
- General cautions

There's a lot to learn about wild edible plants in order to make your experience pleasant and safe. The references included at the end of this publication will help you learn more about finding, collecting, and using wild edibles.

## Uses past and present

Native Americans throughout North America used wild edible plants extensively and ultimately cultivated many vegetables we consider common today, for example, corn, squash, beans, potatoes, and

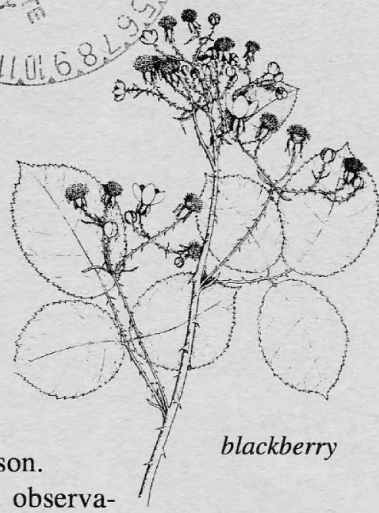
sunflower. They used more than 250 species of wild berries alone.

These people learned to harvest wild plants according to region, habitat, and season.

Through careful observation, Native Americans harvested wild crops at very specific stages to minimize losses to wildlife and natural shedding (ripening and dropping). In the Pacific Northwest, regional tribes learned to beat the birds to the hazelnuts by collecting the nuts in early fall and allowing them to ripen in storage. Crabapples, too tart to eat freshly picked, were sweeter after winter storage. The cambium (inner bark) of several tree species (cottonwood, Douglas-fir, and hemlock) served as emergency food in the spring. And various parts of a single plant, such as the young shoots, young seed heads, pollen, and roots of cattail, were used at different times of the year.

Colonists introduced their own edible plants, some of which escaped and naturalized. Lamb's quarter, curly dock, and dandelion were introduced to the east coast by colonists. These plants are common across the country today, and sometimes are considered pesky weeds.

Today, wild edible plants are used mostly by individuals or in niche markets. Huckleberries are picked and made into jam,



*blackberry*



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candies, and ice cream for sale in specialty markets. Some wild greens, such as young nettle and miner's lettuce, have found their way into upscale restaurants and health food cuisine.

The problem doesn't seem to be availability or variety of wild edibles, but informing consumers about the characteristics of these plants and getting wild produce to market in good condition. The majority of today's taste buds are more accustomed to cultivated vegetables. Venturing into the realm of wild edibles seems to be for only the adventurous connoisseur. There are possibilities, however, in cultivating wild plants and refining handling and processing techniques to deliver tasty, quality products to consumers.

### Market opportunities

Several categories of wild edible plants hold marketing opportunities, for example, edible wild fruits and nuts, cultivated wild herbs and spices for flavoring or teas, and fresh greens, roots, and tubers. Margaret Thomas and David Schumann, in their publication *Income Opportunities in Special Forest Products*, suggest strategies for developing markets in all these categories:

- Where forests can be managed for wild fruit trees and shrubs, a recreational U-pick operation could be established. This strategy could center around local festivals, native recipes and cooking traditions, and local history.
- Another strategy for wild fruits and nuts is to sell cultivated native trees domestically and internationally.
- Herbs and spices offer opportunities for wildcrafting or forest farming through direct marketing, such as roadside stands, U-pick operations, roadside markets, farmers' markets, gift baskets, and mail order.
- Herbs offer a considerable potential in areas not suited to more familiar farm crops. Richard Allan Miller discusses herb farming in his book *The Potential of Herbs as a Cash Crop*.

The market for harvesting and selling wildcrafted, fresh greens is limited because these greens are delicate and spoil easily. Nevertheless, wildcrafted greens can be marketed from woodlots. Miner's lettuce, wild onion, and stinging nettle are a few of the wild edible greens that grow in the forests of the Pacific Northwest.

Two potential markets for wild greens are gourmet restaurants and grocery stores. Both of these markets, however, have drawbacks. Restaurants are not dependable markets because they sell wild edibles as fad or novelty foods. Grocery stores are more dependable than restaurants, but are affected greatly by general consumer tastes and preferences. These markets can be enhanced through a major educational effort in conjunction with marketing activities.

Marketing wild edible plants successfully in rural areas depends on developing centralized processing facilities. These facilities could handle, wash, dry, grade, and sift wildcrafted plants in bulk to add value to the products. The facilities also could be used to process and market local and regional farm crops and provide educational opportunities. Harvesting cooperatives, organized like farmers' Grange halls, are a possible strategy for starting processing and marketing facilities.

### Processing wild edible plants

Wild edible plants are processed in several stages: they are harvested, stored for fresh use, or dried and stored. Details for each stage are different for each plant species. In another book, *Native Plants of Commercial Importance*, Richard Allan Miller gives details for processing 10 plant species located in the Pacific Northwest. The guidelines that follow are based on Miller's book and on what is known about plants used by Native Americans.

### Harvesting

Harvesting at the optimum time for each wild crop is the first step in proper handling and processing. Two aspects are important: harvesting at the right stage of maturity, and getting the product to market as soon as possible after harvest. The ideal time to harvest is in the cool of the morning before a market delivery. If harvesting takes place

during the day or evening, keep the wild produce in cold storage overnight.

Pick and handle wild produce with care. Problems such as decay, visual defects, and water loss result from poor handling at harvest.

### Storage

Storage requirements are specific for different types of wild edibles and for different parts of the plant. Some crops and parts need to be kept humid, and others need to be dry.

Since very little food handling research has been conducted on wild edible plants, little is known about specific storage requirements. You might consider using storage guidelines for cultivated plants similar to the wild plant or plant part you're harvesting; contact your county office of the OSU Extension Service for specific information.

Temperature is the most important factor in controlling product quality. In a pinch, cover the produce with wet newspaper or sheets to keep it cool on short trips to the market. Ideally, use a refrigerated truck.

In most cases, produce needs to be cooled rapidly after harvesting. Post-harvest cooling not only preserves quality, but provides marketing flexibility by eliminating the need to market immediately after harvest.

Storage areas and packing containers must be free of diseased produce, so it's important to sort while harvesting or before storage.

To avoid spillage and crushing, don't fill containers too full.

### Drying

Many wild plants can be dried for flavoring or teas. The drying process removes enough moisture to prevent spoilage. When plants are dried properly, they retain their color and fragrance, thereby bringing a better price in the market.

Drying is relatively easy, but must be done in such a way that you preserve volatile oils (natural flavors) and cosmetic appearance. Richard Allan Miller, in *The Potential of Herbs as a Cash Crop*, outlines a procedure for drying that involves careful control of air flow and temperature to assure a quality product.

## Cautions in using wild edible plants

Cautions about using wild edible plants revolve around the harvesting process. After you locate a suitable stand of wild plants, consider the following factors before harvesting.

### Permission to harvest

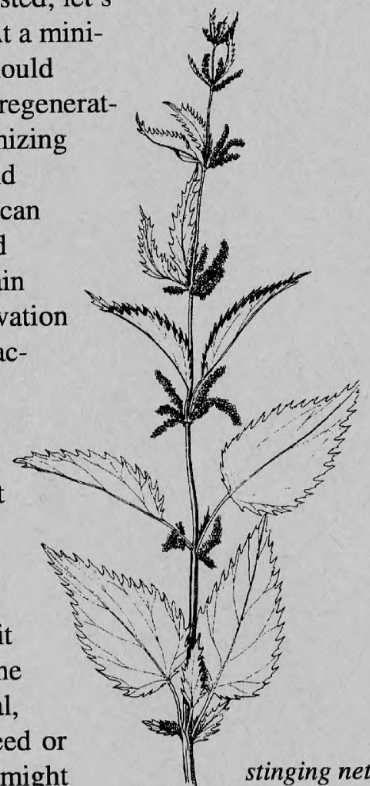
Be sure you have the landowner's permission to harvest. If it is private land, obtain written permission and perhaps a contract to harvest and pay the landowner.

Commercial harvesting on public lands requires a permit. Check with your local Forest Service, Bureau of Land Management, or State Department of Forestry office before harvesting wild edibles for commercial sale. Harvesting wild plants from public lands for personal use may or may not require a permit. Be on the safe side and inquire at the agency's local office.

### Planning for regrowth

Consider developing a plan to ensure wild plants will continue to grow and reproduce in the area after you've harvested; let's call this a regrowth plan. At a minimum, the regrowth plan should include considerations for regenerating the plant and for minimizing site impact. Developing and following a regrowth plan can prevent overharvesting and possibly endangering certain wild edible plants. Conservation and sustainable harvest practices will ensure a steady supply for many years.

Regenerating techniques depend on the plant reproduction process. Spend some time learning not only how to use the plant, but how and where it grows. Find out whether the plant is perennial or annual, and if it reproduces by seed or sprouts. For example, you might



*stinging nettle*

leave scattered individual plants or clumps of plants standing.

Another consideration is how frequently an area or parts of plants can be harvested. You might be able to return to a favorite patch of wild edibles every year, but in other cases, the patch may require 2, 3, or more years to recover.

*Remember, never harvest endangered plant species!*

## Safety

Make sure you have identified the plant correctly. Many edible plants resemble poisonous ones. One mistake can make you or your consumer sick or worse.

Not only should you be sure of the plant's identity, but you should be sure you're harvesting the right plant part in the right season. Plant chemistry changes as plants develops, sometimes changing plants from palatable and safe to disgusting and sickening, or vice versa.

Avoid harvesting in areas that have been sprayed with insecticides or herbicides, or in areas adjacent to heavy road traffic. Chemical residues, heavy metals, exhaust fumes, and dust reduce the quality, taste, and safety of wild plants.

## Summary

This publication provides the basics to understanding the world of wild edible plants. The uses and varieties of these plants are extensive, and learning about all of these plants can take years. But the learning process has immediate rewards in the form of expanded culinary choices, interesting tastes, and potential sources of new income. The reference list that follows will give you some good ideas on where to start, how to market your wares, and where to watch for pitfalls. Whether you're into wild edible plants for personal reasons or profit, happy foraging!

## For more information

Brill, S., and E. Dean. *Identifying and Harvesting Edible and Medicinal Plants in Wild (and Not So Wild) Places* (Hearst Books, 1994).

Elias, T.S., and P.A. Dykeman. *Edible Wild Plants: A North American Field Guide* (Sterling Publishing Co., Inc, 1990).

Gibson, E. *Sell What You Sow: The Grower's Guide to Successful Produce Marketing* (New World Publishing, 1994).

Hall, A. *The Wild Food Trail Guide* (Henry Holt and Company, 1976).

Miller, R.A. *The Potential of Herbs as a Cash Crop* (Acres U.S.A., 1985).

Miller, R.A. *Native Plants of Commercial Importance* (OAK, Inc., 1988).

Both of the Miller books are available from OAK, Inc., 2185 SE Portola Drive, Grants Pass, OR 97526 (541-476-5588).

Robinson, P. *Profiles of Northwest Plants: Food Uses-Medicinal Uses-Legends*, 2nd edition (Far West Book Service, 1979).

Thomas, M.G., and D.R Schumann. *Income Opportunities in Special Forest Products* (United States Department of Agriculture, Forest Service, Agriculture Information Bulletin 666, 1993). Available for \$13.00 from United States Government Bookstore, 1305 SW First Avenue, Portland, OR 97201-5801.

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